TEACH COMMON CORE STANDARDS
WITH THE EEI CURRICULUM

Created with your needs in mind, this document shows the correlation between the EEI Curriculum and the California Common Core State Standards. By teaching the EEI unit lessons in your classroom, you will be simultaneously addressing the Common Core standards depicted in this guide.

3.3.c. and 3.3.d.—Living Things in Changing Environments

In this unit, students study three different ecosystems in California, using those examples to explore how humans and other living things alter environments. Throughout the unit, students use a wide variety of techniques, such as reading, paragraph writing, oral discussion, artistic expression, dramatic and kinesthetic activities, and logical reasoning. Students explore large-scale change in an ecosystem. They use a sequencing activity to examine changes in a mixed forest habitat, discovering how large-scale change can cause some species to move or die out. Later, students consider how habitat restoration efforts change an environment once again, enabling plants and animals to return and thrive.

LESSONS	RI.3.1	RI.3.2	RI.3.3	RI.3.4	RI.3.7	RI.3.10	W.3.1	W.3.2	W.3.8	SL.3.1	SL.3.2	L.3.4
California Connections	✓	✓	✓	✓	✓	✓			✓		✓	
1	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
2	✓	✓	✓	✓	✓	✓				✓	✓	✓
3	✓	✓		✓	✓	✓				✓		✓
4	✓	✓	✓	✓	✓	✓			✓	✓		✓
5	✓	✓		✓			✓	✓	✓	✓		✓
Traditional Assessment	✓		✓					✓				
Alternative Assessment	✓		✓					✓				

COMMON CORE STANDARDS

Note: *For your reference, the list of California Common Core State Standards abbreviations is on the following page.*

Using the EEI-Common Core Correlation Matrix

The matrix on the front page identifies a number of Common Core standards that are supported by this EEI unit. However, the check marks in the matrix do not necessarily signify that the Common Core standards checked will be taught to mastery by using this EEI unit alone. Teachers are encouraged to select which Common Core standards they wish to emphasize, rather than teaching to every indicated standard. By spending more time on selected standards, students will move toward greater Common Core proficiency in comprehension, critical thinking and making reasoned arguments from evidence. Teaching this EEI unit will provide opportunities for teachers to implement the shift in instructional practice necessary for full Common Core implementation.

California Common Core State Standards Abbreviations

- **CCCSS:** California Common Core State Standards
- **L:** Language Standards
- **RI:** Reading Standards for Informational Text
- **SL:** Speaking and Listening Standards
- **W:** Writing Standards

Note: *Since each Common Core Standard includes a breadth of skills, in this correlation, the portion of the standard description that is featured in the Common Core Standards and Applications is cited, using "…" to indicate omitted phrases. For a list of the complete standard descriptions, please see the Common Core Reference Pages located on page 18 of this document.*

A Note about Common Core Speaking and Listening Standards

Many of the EEI units provide various learning structures, materials, and groupings that lead toward students working in pairs or small groups to discuss concepts and ideas. This supports the skill in Speaking and Listening Standard 1 "Participate effectively in a range of collaborative discussions (one-on-one, groups…) with diverse partners." With prior instruction in collaborative discussion techniques, students can be placed in pairs or small groups to discuss the lesson topics. To aid in teacher planning, the lessons are listed below along with their learning structures for whole class, pairs/partners, and/or small groups:

- **Lesson 1:** Whole class, pairs, and small groups
- **Lesson 2:** Small groups
- **Lesson 3:** Whole class, small groups
- **Lesson 4:** Whole class, small groups
- **Lesson 5:** Small groups

National Geographic Resources

- **Habitats** wall map (Lessons 3 and 4)

Unit Assessment Options

Assessments	Common Core Standards and Applications
Traditional Assessment	
Students answer multiple-choice questions and write sentences to answer questions.	**RI.3.1:** Ask and answer questions to demonstrate understanding… **RI.3.3:** Describe the relationship between a series of… scientific ideas… **W.3.2:** Write informative/explanatory texts… b) Develop the topic with facts…and details. c) Use linking words and phrases…
Alternative Assessment	
Students read and analyze several scenarios relating to changes in different ecosystems. They also respond to two short-answer questions about natural and human-made changes to an ecosystem.	**RI.3.1:** Ask and answer questions to demonstrate understanding… **RI.3.3:** Describe the relationship between a series of… scientific ideas… **W.3.2:** Write informative/explanatory texts… b) Develop the topic with facts…and details. c) Use linking words and phrases…

Lesson 1: The Salt Marsh Ecosystem

Students read about the salt marsh ecosystem and the special organisms adapted to living there. They work in small groups to create murals of the ecosystem, and then predict how changes to the marsh might affect different plants and animals.


Lesson 1

The Salt Marsh Ecosystem

Lesson 1

Learning Objective

Key Vocabulary

Use this correlation in place of the **Procedures** on pages 44–45 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the **Dictionary Workbook** and the vocabulary **Word Wall Cards** to introduce new words to students as appropriate. Ask students to write their name in the space provided in the Dictionary. These documents are provided separately. ***Tip:*** *If* ***Dictionary Workbooks*** *need to be reused from year to year, students should not write in them.*	**L.3.4d:** Use glossaries or beginning dictionaries…to determine or clarify the precise meaning of key words and phrases ***in all content areas.*** **CA** **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area…*
Step 1	
Inform students that over the next several days, they will examine different ecosystems and explore what happens when these ecosystems change. Project **Sweetwater Marsh** (Visual Aid #1). Identify the marsh by name and inform students that this ecosystem is a saltwater marsh. Have students look at the photograph and guess what kinds of plants and animals live in this marsh. (*Plants, fish, crabs, birds.*) Ask students to predict the kinds of changes that could happen to this marsh. (*People could build on top of it; it could flood; it could become polluted.*) Inform students that they will learn about this ecosystem and changes to it.	**RI.3.7:** Use information gained from illustrations…(e.g.,… photographs)…to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). ***Suggestion:*** *As students read the text in the following steps, have students refer back to what they know from the visual aid to increase understanding of the text.*
Step 2	
Distribute a ***California Connections: Sweetwater Marsh National Wildlife Refuge*** reader to each student. Have the class follow along as you read Chapter 1 aloud. Pause after reading pages 3–4. Ask students what words they would use to describe this marsh. Record answers on the board. (*Salty, muddy, water rises and falls with the tide.*)	**RI.3.1:** Ask and answer questions to demonstrate understanding of a text… **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text…

Procedures	Common Core Standards and Applications
Step 3	
Explain to students that plants and animals need special structures or have other special characteristics, called adaptations, to help them survive in particular places with specific conditions. Ask students to look for examples of adaptations in plants or animals that help them survive in the salty, muddy tidal conditions of the marsh as you read the remainder of Chapter 1. After the reading, have students share examples of organisms and their adaptations they heard about in the story. (*Pickleweed plants collect salt in their leaf tips, which they later lose; green sea turtles shed tears to get rid of salty water; round stingrays hide in the mud.*)	**RI.3.1:** Ask and answer questions to demonstrate understanding of a text… **RI.3.7:** Use information gained from illustrations (e.g.,… photographs) and the words in a text to demonstrate understanding of the text… **RI.3.10:** …read and comprehend informational texts, including…science…texts,…independently and proficiently. ***Suggestion:*** *After reading a portion of the text aloud, have students reread it to a partner to practice reading independently.* **SL.3.2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. ***Suggestion:*** *While reading aloud, have students listen for any relationships between the scientific ideas or concepts that are presented, especially the reasons certain plants and animals live in this habitat and what makes it possible for them to survive.*
Step 4	
Organize students into groups of 4. Distribute to each group one large sheet of bulletin board paper and a set of colored markers, colored pencils, or crayons. Inform students that they will work together in small groups to create murals of plants and animals that live in the Sweetwater Marsh. For each plant or animal, they will draw a sketch of it on their mural and write a brief description of the organism's adaptations and needs. To model, have students reread the passage about the salt marsh bird's beak on pages 7–8 in the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** reader. Ask for volunteers to answer the following questions: ■ What kinds of adaptations does this plant have? (*It grows on top of the pickleweed to help it survive in salty water.*) ■ What kinds of things does the plant need to survive? (*It needs bees nearby to pollinate it; it needs water that is not too salty, or it will not sprout.*) (*Note: A sample student mural is provided on page 46.*) ***Tip:*** *Do this as a separate lesson, as this is a critical component of the unit, but takes a great deal of time.*	**RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea. **RI.3.3:** Describe the relationship between a series of…scientific ideas or concepts…in a text… **RI.3.7:** Use information gained from illustrations (e.g.,… photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories.

Procedures	Common Core Standards and Applications
Step 5	
When students have completed their murals, review their work as a class using the following discussion prompts. Ask student volunteers for answers. ■ The marsh is salty. Plants and animals have adaptations that help them survive in the salty water. What are some examples of these adaptations? (*Pickleweed gets rid of salt by storing it in its leaf tips; salt marsh bird's beak grows on top of pickleweed to get its nutrients; round stingrays adjust the salty water in their bodies to match the surrounding water; green sea turtles shed tears to get rid of salt.*) ■ What is an example of a plant or an animal that cannot survive if the water gets too salty? (*Salt marsh bird's beak cannot sprout if the water is too salty.*) ■ The marsh is muddy. What is one animal or plant that survives well in mud? (*Round stingrays*) What is one animal or plant that cannot survive well in mud? (*Eelgrass*) ■ Some of the plants and animals rely on each other in the marsh. They may eat one another. They may help provide a home for one another. What are some examples of these relationships? (*Pickleweed is a host for salt marsh bird's beak; green sea turtles eat eelgrass; Belding's savannah sparrows nest in pickleweed.*) ■ Let's imagine some changes in the marsh. Imagine that the marsh became saltier. What would happen to the plants and animals that live there? Why? Tell students to discuss this with their group for a minute, and then share answers. (*The salt marsh bird's beak would not survive, because it cannot sprout in salty water; other plants and animals would probably survive, because they have adaptations to survive in salty water.*) ■ Let's imagine another change. Imagine that the marsh became muddier. What would happen to the different plants and animals that live there? Why? Discuss this with their group for a minute, and then share answers. (*For some organisms, their lives would not change much; the round stingray hides in mud, so it would survive; eelgrass needs a lot of sunlight to survive, so it would die; green sea turtles eat eelgrass, so they might die or swim somewhere else to find food.*) Emphasize to students that not all plants and animals will respond to changes in the marsh in the same way. Some might die or move away. Others might survive or even thrive.	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.

Procedures	Common Core Standards and Applications
Step 6	
Distribute a **Student Workbook** to each student. Tell them to turn to **The Changing Salt Marsh** (Student Workbook, page 2–3). Read the instructions aloud. Give students time to complete the task. Gather the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** readers and students' murals. Collect **Student Workbooks** and use **The Changing Salt Marsh** for assessment. ***Tip:*** *If* ***Student Workbooks*** *need to be reused from year to year, students should not write in them. Some strategies teachers use to preserve the workbooks are:* ■ *Have students use binder paper or other lined or unlined paper* ■ *Have students use a sheet protector over the page and write with a whiteboard marker* ■ *Do together as a class on a projector or chart paper* ■ *Project the digital fill-in version and do together as a class* ■ *Students use digital devices to fill in the digital version found on the website.* ■ *Make student copies when necessary*	**RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *This can be done in small groups. Model how to locate the key details in the text to write the information on the workbook page.* **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly. ***Suggestion:*** *Prior training in collaborative conversation protocols will increase the collaborative nature of this small-group task.* **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories. ***Suggestion:*** *Assist students in understanding which item of information to place in each box.*

Lesson 2: Altering the Marsh: Survive, Move, or Die?

Students review the adaptations and needs of organisms in the salt marsh ecosystem. They then read about alterations to this environment. They analyze and discuss how each change will affect different organisms, and they add to the mural they created in Lesson 1.


Lesson 2

Altering the Marsh: Survive, Move, or Die?

Use this correlation in place of the **Procedures** on pages 56–57 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the **Dictionary Workbook** and the vocabulary **Word Wall Cards** to introduce new words to students as appropriate.	**L.3.4d:** Use glossaries or beginning dictionaries…to determine or clarify the precise meaning of key words and phrases ***in all content areas.*** **CA** **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area…*
Step 1	
Organize students into the same groups of four as in Lesson 1. Distribute the murals students created in Lesson 1. Review the murals by asking the following discussion questions: ■ What words describe this marsh? (*Muddy, salty, has tides*) ■ All of these animals and plants are adapted to live in this salty marsh. How? Pick an example to describe. (*Green sea turtles shed tears to get rid of salt; pickleweed collects salt in its leaf tips.*) ■ Which animal or plant will be harmed if it becomes too salty? (*Salt marsh bird's beak*) What will happen to it? (*It will be unable to sprout and reproduce.*) ■ One of these plants cannot grow in muddy water. Which plant is it? (*Eelgrass*) ■ If the water becomes muddier, what might happen? (*Eelgrass would die because sunlight does not reach into deep water; round stingrays might have more protection.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.

Procedures	Common Core Standards and Applications
Step 2	
Inform students that they will study changes in the Sweetwater Marsh. Redistribute the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** reader to each student. Have students think about the changes that have happened to this marsh as they read Chapter 2. Read Chapter 2 aloud as students follow along.	**RI.3.1:** Ask and answer questions to demonstrate understanding of a text… **RI.3.7:** Use information gained from illustrations (e.g.,… photographs) and the words in a text to demonstrate understanding of the text… **RI.3.10:** …read and comprehend informational texts, including…science…texts…independently and proficiently. ***Suggestion:*** *After reading a portion of the text aloud, have students reread it to a partner to practice reading independently.* **SL.3.2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. ***Suggestion:*** *While reading aloud, have students listen for any relationships between the scientific ideas or concepts that are presented, especially the reasons certain plants and animals live in this habitat and what makes it possible for them to survive.*
Step 3	
Distribute a set of **Altering the Salt Marsh** (Teacher's Masters, pages 2–4) cards to each group. Have students find the card that starts with these words: "Power plants make the temperature of the water…" Have the groups discuss the effects of power plants on the temperature of water. Ask a student volunteer, "How do power plants affect the temperature of water?" (*The temperature goes up.*) Have students color in the upward-pointing arrow to indicate the correct answer.	**RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *Model how to locate the key details in the text to write the information on the workbook page.* **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 4	
Read the remainder of the same card, using green sea turtles as an example: "This makes the population of green sea turtles go (up or down)." Ask students, "What happens to the sea turtle population?" (*The population goes up, because they like warm water.*) Have students color in the upward-pointing arrow to indicate the correct answer. Have students use tape to attach this card to their mural. They should place the card next to the drawing of the green sea turtle. (*Note: Two species are affected by temperature, so there are two power plant/temperature cards. Students should use the second power plant/temperature card for the second species, the round stingray.*)	**RI.3.2:** Determine the main idea…; recount the key details… **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 5	
Have students work in their groups to complete the remaining eight cards by coloring in the correct arrow and writing in the names of the plants and animals. Remind students to use the information on their murals and in the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** reader. Tell them to attach their cards to the murals. Circulate among the student groups to assist students and answer questions.	**RI.3.2:** Determine the main idea…; recount the key details… **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.

Procedures	Common Core Standards and Applications
Step 6	
When students have completed all their cards and attached them to the murals, review the answers as a class. (*Note: An Answer Key and Sample Answers for* ***Altering the Salt Marsh*** *are provided on pages 60–62.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 7	
Help students summarize their findings by asking the following discussion questions: ■ What happens when the size of a population goes down? (*Plants and animals die, they do not reproduce, or they move away.*) ■ What is an example of a plant that has died in Sweetwater Marsh? (*Pickleweed has died in places where building activity took place. Eelgrass has died in places that became deeper or muddier. Salt marsh bird's beak has died when pickleweed has been removed; also, it does not reproduce without bees.*) ■ What happens when the size of a population gets larger? (*Plants and animals survive, they have more babies, or they move in.*) ■ Which animal has moved to Sweetwater Marsh? (*The green sea turtle has moved to warm waters near the power plant.*) ■ What animal has been harmed in Sweetwater Marsh? (*Belding's savannah sparrow has been unable to nest without pickleweed.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly. **SL.3.2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
Step 8	
Redistribute the students' individual **Student Workbooks**. Tell them to turn to **Survive, Move, or Die?** (Student Workbook, page 4). Read the instructions aloud. Give students time to complete the **Survive, Move, or Die?** independently. Gather the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** readers. Collect **Student Workbooks** and use **Survive, Move, or Die?** for assessment.	**RI.3.1:** Ask and answer questions to demonstrate understanding… **RI.3.3:** Describe the relationship between a series of… scientific ideas… ***Suggestion:*** *Model how to locate the key details in the text to write in the information.*

Lesson 3: Lights, Camera, Action! A Play About Changing Habitats

Students identify scrubland and chaparral ecosystems on a map, and then read and perform a play about changes to these ecosystems. They analyze the play through discussion, focusing on how living things cause changes that are helpful, neutral, or harmful to other organisms.


Lesson 3

Lights, Camera, Action! A Play About Changing Habitats

Learning Objectives

Background

Key Vocabulary

National Geographic Resources

- **Habitats** wall map

Use this correlation in place of the **Procedures** on pages 68–69 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the **Dictionary Workbook** and the vocabulary **Word Wall Cards** to introduce new words to students as appropriate.	**L.3.4d:** Use glossaries or beginning dictionaries…to determine or clarify the precise meaning of key words and phrases ***in all content areas.*** **CA** **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area.*
Step 1	
Draw students attention to the **Habitats** wall map; remind students that a habitat is a place where a living thing gets what it needs to survive. (*Water, shelter and food*) Point out the inset "Scrubland and Chaparral" and call students' attention to the chamise and the Pacific rattlesnake that live in this habitat. Inform students that today they will study how this habitat and others have changed over time. Point to the map key and identify the symbol for scrubland and chaparral. Point out the approximate location of their community on the wall map. Have some students come up to the wall map and find the scrubland and chaparral habitat nearest to their community. Ask students to find other scrubland and chaparral areas in the state. Inform them that San Diego County (the southwestern corner of the state) has more scrubland and chaparral than any other county.	**RI.3.7:** Use information gained from illustrations (e.g., maps…)…to demonstrate understanding… ***Suggestion:*** *As they read the text in the following steps, have students refer back to what they know from the map to increase understanding of the text.*
Step 2	
Redistribute students' individual **Student Workbooks**. Tell them to turn to **Change in the Chaparral and Scrubland Habitats Script** (Student Workbook, pages 5–8). Tell them that they will participate in a play about how these habitats are changing. Project **Scrubland and Chaparral Habitats** (Visual Aids #2–3). Identify each species on the visual aid. Assign students to play each of these roles in the play. (*Note: The script lists a suggested number of students for each role.*)	**RI.3.7:** Use information gained from illustrations (e.g.,… photographs) and the words in a text to demonstrate understanding of the text…

Procedures	Common Core Standards and Applications
Step 3	
Project **New Arrivals** (Visual Aid #4). Point out to students that grasses now live where chaparral used to be. Identify the brown-headed cowbird, another new arrival to the scrubland and chaparral habitats. Assign students to play these two roles in the play. Finally, assign one student to be the narrator and the remaining students to be the people in the play.	**RI.3.7:** Use information gained from illustrations (e.g.,… photographs) and the words in a text to demonstrate understanding of the text…
Step 4	
Organize students according to their roles. Distribute colored markers and nametags or masking tape to the groups. Have each student write the name of his or her character on a nametag or a piece of masking tape. Tell students to put on their nametags so that others will know their roles. Have students review the script to identify their speaking parts. Decide which student will read which part, and mark their parts so they will not forget to read their lines. Have students practice reading their lines and talk to others in their group about how their organism might act. For example, how would a tree stand? How would a bird fly?	**RI.3.2:** Determine the main idea…; recount the key details… **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 5	
Bring all the students together to act out the play. Have students sit on the floor until it is their turn to be on stage, and have students return to the floor when they are instructed to exit the stage. Stop the play after Act 1 for a brief discussion. Use the following prompts: ■ The chamise and the California sagebrush have special adaptations. These help them survive. Can you think of an example for each? (*Chamise can resprout from an underground root burl after a fire; California sagebrush can grow from seeds after a fire.*) ■ How does the Pacific rattlesnake depend on the chamise? (*The Pacific rattlesnake needs the chamise for nesting; the California gnatcatcher uses the California sagebrush for nesting.*) ■ How does the California gnatcatcher depend on California sagebrush? (*The California gnatcatcher uses the California sagebrush for nesting.)*	**RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *Model how to locate the key details in the text.* **RI.3.10:** …read and comprehend informational texts, including…science…texts…independently and proficiently. ***Suggestion:*** *This works well with the think/pair/share strategy.* **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.

Procedures	Common Core Standards and Applications
Step 6	
Have students read Acts 2 and 3. Conduct a class discussion. Use the following questions to focus the discussion: ■ What kinds of changes have people made to these habitats? (*People built roads, houses, farms, ranches, and cities; their activities contribute to increased frequency of fires.*) ■ What organisms were hurt by these changes? (*Plants, such as the chamise and the California sagebrush, have been removed when land is cleared, and burned when fires occur; if fires occur too frequently, the plants cannot recover. Animals, such as the Pacific rattlesnake and the California gnatcatcher have been harmed, too, because those plants are part of the habitat they need to survive.*) ■ Which organisms were helped by these changes? (*The nonnative grasses grew more after frequent fires; the cowbirds liked the open spaces created by people.*) ■ How did the grasses change the chaparral? (*The grasses grew quickly after the fires and prevented other native plants from sprouting.*) ■ How did the cowbird change life in the scrubland? (*The cowbird harmed the gnatcatcher by laying its egg in a gnatcatcher nest. The gnatcatcher may abandon its nest, and all of its eggs will die. If the gnatcatcher stays on the nest, it will raise a cowbird. A baby cowbird outgrows its gnatcatcher nestmates and forcefully demands food. As a result, the gnatcatcher babies may starve to death.*) ***Tip:*** *Much of this lesson requires students to listen to information as it is presented. Review listening skills as well as how students should paraphrase and summarize the information presented. To increase comprehension, use structures such as think/pair/share, partner share, and whiteboard responses throughout each step.*	**RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *Model how to locate the key details in the text.* **RI.3.10:** …read and comprehend informational texts, including…science…texts…independently and proficiently. **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 7	
Tell students to turn to **Changes in Southern California** (Student Workbook, page 9). Review the instructions with students. Demonstrate how to complete a paragraph by reviewing the first fill-in-the-blank answer with students. (*Build houses and roads*) Have a volunteer explain how they got that answer. Have students complete the exercise independently. Collect **Student Workbooks** and use **Changes in Southern California** for assessment.	**RI.3.1:** …answer questions to demonstrate understanding… **RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *Model how to locate the key details in the text to write in the information.*

Lesson 4: What Happened in the San Bernardino Mountains?

Students examine two species in a mixed forest habitat. They read about and examine photographs of different changes that have happened in the forest. They then work together to sequence the events to discover how the actions affected the species.


Lesson 4

What Happened in the San Bernardino Mountains?

National Geographic Resources

- **Habitats** wall map

Use this correlation in place of the **Procedures** on page 84 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the **Dictionary Workbook** and the vocabulary **Word Wall Cards** to introduce new words to students as appropriate.	**L.3.4d:** Use glossaries or beginning dictionaries…to determine or clarify the precise meaning of key words and phrases ***in all content areas.*** **CA** **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area…*
Step 1	
Using the **Habitats** wall map, point to the areas that are considered "mixed evergreen forest" in the state. Ask a student to point to the pileated woodpecker, the fisher, the lodgepole pine, and the mountain bluebird. On the map key, identify the symbol for mixed evergreen forest. Ask a student to locate some mixed evergreen forest areas on the California **Habitats** wall map. Point out the patch of mixed evergreen forest east of Los Angeles. Tell students they will look more closely at a series of events that happened in the San Bernardino National Forest that changed this mixed forest habitat.	**RI.3.7:** Use information gained from illustrations (e.g., maps…)…to demonstrate understanding… ***Suggestion:*** *As they read the text in the following steps, have students refer back to what they know from the map to increase understanding of the text on the Information Cards.*
Step 2	
Organize students into eight groups. Distribute a set of **San Bernardino National Forest** (Information Cards #1–7) to each group, reserving one set for use in Step 4. Have each group find **San Bernardino National Forest: Life** card and put the other cards aside. Read this card aloud to students as they follow along. Inform them that today they will find out what has happened to the ponderosa pine and the mountain yellow-legged frog as their mixed forest habitat experienced many changes.	**RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea. ***Suggestion:*** *Reread the text, this time having students identify the changes caused by people to the environment.* **RI.3.3:** Describe the relationship between a series of…scientific ideas…in a text…

Procedures	Common Core Standards and Applications
Step 2 (Continued):	
	RI.3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). ***Suggestion:*** *Have students identify the illustrations and text that work together to explain where, when, why and how key events occur.* **RI.3.10:** …read and comprehend informational texts, including…science…texts…independently and proficiently.
Step 3	
Ask students to discuss in their groups what kinds of changes could happen to a forest. After a minute of group discussion, ask for volunteers to share their answers. As volunteers offer answers, record these on the board. (*A fire could burn it down; people could chop down the trees.*) Ask students to identify the items on the list that are caused by humans and those that are natural changes. (*A fire could be caused by lightning, a natural change, or by humans; the cutting of trees is a human-caused change.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 4	
Have students look at the remaining six information cards. Ask students to read the cards in their groups and sequence them in order from the event that happened first to the one that happened last. When students have finished the task, call on volunteers to share which card came first, second, third, and so on. (*1— mountain yellow-legged frogs* [*Information Card #1*]*; 2—pollution* [*Information Card #5*]*; 3—drought* [*Information Card #4*]*; 4—pine beetles* [*Information Card #2*]*; 5—fire* [*Information Card #6*]*; 6—floods and mudslides* [*Information Card #7*]*; 7—mountain yellow-legged tadpoles* [*Information Card #3*]) If students disagree on a given answer, discuss students' reasoning as a class. (*Sample student responses: We put the air pollution first because it has been going on for many years; we put the pine beetle attack after the drought because pine beetles attack weak trees, and droughts make trees weak.*) Post the information cards in the correct order at the front of the room as students offer their answers.	**RI.3.1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. **RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea. **RI.3.3:** Describe the relationship between a series of… scientific ideas…in a text, using language that pertains to time, sequence… **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 5	
Redistribute the students' individual **Student Workbooks**. Tell them to turn to **What Happened in the San Bernardino Mountains?** (Student Workbook, page 10). Have them complete the assessment independently. Collect **Student Workbooks** and use **What Happened in the San Bernardino Mountains?** for assessment.	**RI.3.2:** Determine the main idea…; recount the key details… ***Suggestion:*** *Model how to locate the key details in the text to write the information on the workbook page.* **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories.

Lesson 5: Restoring Habitats

Students review the salt marsh habitat from Lessons 1 and 2, and brainstorm ideas about restoration. They read about habitat restoration and identify methods used to help plants and animals survive in changed habitats. Students summarize their findings in a paragraph.


Lesson 5

Restoring Habitats

Use this correlation in place of the **Procedures** on page 96 of the Teacher's Edition.

Procedures	Common Core Standards and Applications
Vocabulary Development	
Use the **Dictionary Workbook** and the vocabulary **Word Wall Cards** to introduce new words to students as appropriate.	**L.3.4d:** Use glossaries or beginning dictionaries…to determine or clarify the precise meaning of key words and phrases ***in all content areas.*** **CA** **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area…*
Step 1	
Organize students into the groups of four they formed in Lesson 1. Redistribute the **Sweetwater Marsh Murals** they created in Lesson 1. On the front or back of their murals, have students create a T-table with the following headings: **Populations that have gone down in the marsh** / **Ways to restore these populations** *Belding's savannah sparrow* / *Remove the power plant* *Eelgrass* / *Create new marshes* *Pickleweed* *Salt marsh bird's beak*	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly. ***Suggestion:*** *Prior training in collaborative conversation protocols will increase the collaborative nature of this small group task.* **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories. ***Suggestion:*** *Assist students in understanding which item of information to place in each category.*
Step 2	
Remind students that many forms of life in the marsh have been harmed. Ask students to review their murals and to record (in the left-hand column of the T-chart) the names of plants and animals that have decreased in population. Have volunteers share these answers with the class. (*Belding's savannah sparrow, eelgrass, pickleweed, salt marsh bird's beak*) Ask students to work together to brainstorm some ideas about how these populations could be restored. Have volunteers share some of their answers with the class. (*Remove the power plant; create new marshes.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly. **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories.

Procedures	Common Core Standards and Applications
Step 3	
Redistribute the ***California Connections: Sweetwater Marsh National Wildlife Refuge*** reader and students' individual **Student Workbooks**. Tell them to turn to **Restoring Sweetwater Marsh** (Student Workbook, pages 11–12). Review the instructions for Part 1 of **Restoring Sweetwater Marsh.** Have students work in groups to read Chapter 3 and complete the T-chart on their murals, as well as Part 1 of **Restoring Sweetwater Marsh**.	**RI.3.1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. **RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea. **SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly. **W.3.8:** Recall information from experiences or gather information from print…sources; take brief notes on sources and sort evidence into provided categories.
Step 4	
When groups have completed their work, call on volunteers for answers to the chart in Part 1 of **Restoring Sweetwater Marsh**. Record the answers on the board so that students may add any their group may have omitted. (*Note: An Answer Key and Sample Answers for* ***Restoring Sweetwater Marsh*** *are provided on pages 98–99.*)	**SL.3.1:** Engage effectively in a range of collaborative discussions (…in groups…)…, building on others' ideas and expressing their own clearly.
Step 5	
Read aloud the instructions to Part 2 of **Restoring Sweetwater Marsh**. Answer any clarifying questions from students. Have students complete the paragraph independently. Gather ***California Connections: Sweetwater Marsh National Wildlife Refuge*** readers and the murals. Collect Student Workbooks and use **Restoring Sweetwater Marsh** for assessment.	**W.3.1:** Write opinion pieces…supporting a point of view with reasons. a) …state an opinion… b) Provide reasons that support the opinion. c) Use linking words and phrases (e.g., *because, therefore, since, for example*) to connect opinion and reasons. **W.3.2:** Write informative/explanatory texts to…convey… information clearly. b) Develop the topic with facts, definitions, and details. ***Suggestion:*** *Before students write, review appropriate linking words and sentence structures for answering the questions.*

Unit Assessment

Refer to the introduction pages at the front of this document for information regarding the Traditional and Alternative Assessments for this unit and their Common Core correlations.

California Common Core State Standards Descriptions

Language Standards

- **L.3.4:** Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on *grade 3 reading and content,* choosing flexibly from a range of strategies.
  - d) Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases ***in all content areas***. **CA**

Reading Standards for Informational Text

- **RI.3.1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RI.3.2:** Determine the main idea of a text; recount the key details and explain how they support the main idea.
- **RI.3.3:** Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
- **RI.3.4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 3 topic or subject area.* **(See grade 3 Language standards 4–6 for additional expectations.) CA**
- **RI.3.7:** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- **RI.3.10:** By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

Speaking and Listening Standards

- **SL.3.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly.
- **SL.3.2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Writing Standards

- **W.3.1:** Write opinion pieces on topics or texts, supporting a point of view with reasons.
  - a) Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.
  - b) Provide reasons that support the opinion.
  - c) Use linking words and phrases (e.g., *because, therefore, since, for example*) to connect opinion and reasons.
- **W.3.2:** Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
  - b) Develop the topic with facts, definitions, and details.
  - c) Use linking words and phrases (e.g., *also, another, and, more, but*) to connect ideas within categories of information.
- **W.3.8:** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.